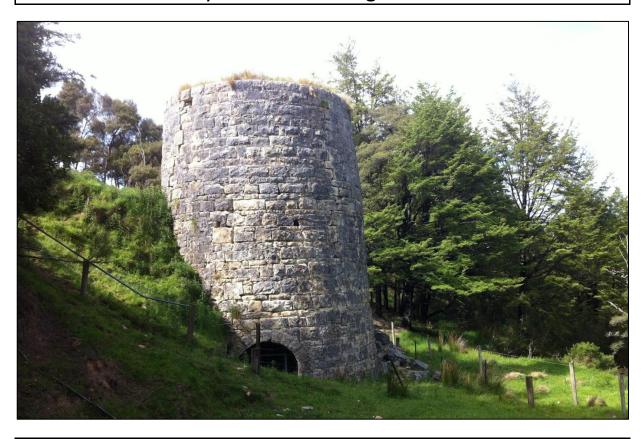
Heritage Item 18

Staveley Lime Kiln – Langdown Pot Kiln



Location

Address: Boyds Road, Staveley

Co-ordinates: Northing 5728874, Easting 2381485

Legal Description: Sec 3 SO 18941

Owner: Department of Conservation

Purpose		
Current Use:	Remnant	
Original/Past Uses:	Lime Kiln	

Heritage Significance and Category		
Heritage Significance:	Physical; Historic	
Heritage NZ:	Not registered	
Ashburton DC:	Category A	

Site Assessment		
Assessed by: Date Assessed:	Arlene Baird, Davie Lovell-Smith Ltd. 29 November 2014	

Detail

Description:

The Langdown 'pot' kiln was constructed in 1897. It is a large, cylindrical structure built of limestone blocks of varying shapes and sizes. There are regular layers of reinforcing wires running around the kiln to provide additional strength and support. The keystone set in the archway of the tunnel has the number 189 (probably part of the date) and initials inscribed into it – although now very faint. Holes exist in the walls - these were used to control the draught when firing up the kiln. Fire bricks lined the interior of the kiln – the original firebricks which were probably made from clay on the site, were apparently unable to withstand the heat in the kiln and had to be replaced at some stage by more resistant firebricks from Brunner.

A wooden tramway ran to the kiln, up to 40 feet above ground, allowing the wagons of coal or lime to pass over the top of the kiln. Coal was mined nearby to supply the kiln – this coal was pushed down a flume by a water race to a hopper where it was loaded onto wagons and taken to the kiln.

The limestone for burning was supplied from a quarry about 100m east of the kiln (heritage item H132). The method of firing was general to all the kilns - a layer of wood, usually manuka, was set at the bottom. Broken limestone and coal were then placed in alternate layers in the kilns until it was full. After the coal was ignited it took around a week of intense heat to burn the lime, the mixture was then allowed 48 hours to cool before being removed from the kiln by opening the hopper at the bottom and using iron shovels to dislodge the burnt lime. This was then bagged and transported by pony and waggon on the tramway.

The kiln sustained extensive damage during the earthquakes of 2010/2011 and has been closed to the public since. The top third (approximately) of the southern side of the kiln has been worst effected with all of the limestone blocks being dislodged. These still remain scattered around the base of the structure. On the remainder of the kiln, large cracks are evident and the whole structure appears to be quite unstable.

This kiln, along with the later Christchurch Lime Company kiln (heritage item H17) is an excellent historical example of an important industry in this region prior around the turn of the century.

History:

William Langdown started the first Staveley lime kiln business in 1896. It consisted of a coal mine, lime quarry (heritage item H132), lime kiln and a tramway from the kiln to Sharplin's sawmill. The second kiln (heritage item H17) was built by the Christchurch Lime Company in 1904 and operated until 1910. Great variation exists over the historical details of these kilns — namely over which was built first, dates, names and the spelling of Langdown (often referred to as Langdon).

William Langdown was a Christchurch coal and timber merchant and he owned a lime kiln in Kakahu and several in Christchurch. In 1896 he applied for a 20 year lease of a 111 acre area at Staveley for the purpose of burning lime. The application also included a coal mining lease for 300 tons.

Langdown put in 320 feet of tunneling, followed by a further 180 feet, to access a coal seam with suitable coal. In April 1897 he received approval to construct a tramway across the forest reserve linking up with Sharplin's timber tramway to enable transportation of the burnt lime and building stone. An Ashburton Guardian article in September 1897 states that the tramway to Sharplin's mill was complete and the kiln was currently being erected by competent workmen.

Detail

These were supposedly Cornish stonemasons who Langdown had brought in to build the kiln with expertise. Unfortunately the coal was of inferior quality so the burnt lime was only obtaining low prices and reports indicate that by 1898 Langdown was selling the lime at a loss.

In late 1899 Langdown applied for an extra 10 acres as a mining occupational lease. In 1901 Langdown's interests in all the leases were transferred to the Springburn Lime and Coal Company (for which Langdown appears to have been manager — as referenced in a newspaper article in the Press in August 1900). It appears this company made little profit and in August 1902 the mining leases were transferred to the Christchurch Lime Company.

In 1904 the new kiln (heritage tem H17) was built and it is assumed that the Langdown kiln was not used after this time.

Today the kiln is owned and maintained by the Department of Conservation. Public access was permitted prior to the earthquakes, but the kiln is now closed for safety reasons.

Notable Features:

Limestone blocks; reinforcing wires; holes to control draught; arched openings; partial date on keystone; location.

Condition:

The kiln is in a bad state of disrepair. Extensive damage was sustained during the 2010/2011 earthquakes which has left the kiln unstable. The limestone blocks on the top third of the southern side of the kiln have been dislodged and lie around the base of the structure. The kiln is currently closed to the public for safety reasons and will require extensive reconstruction or stabilisation to be in a position to be reopened.

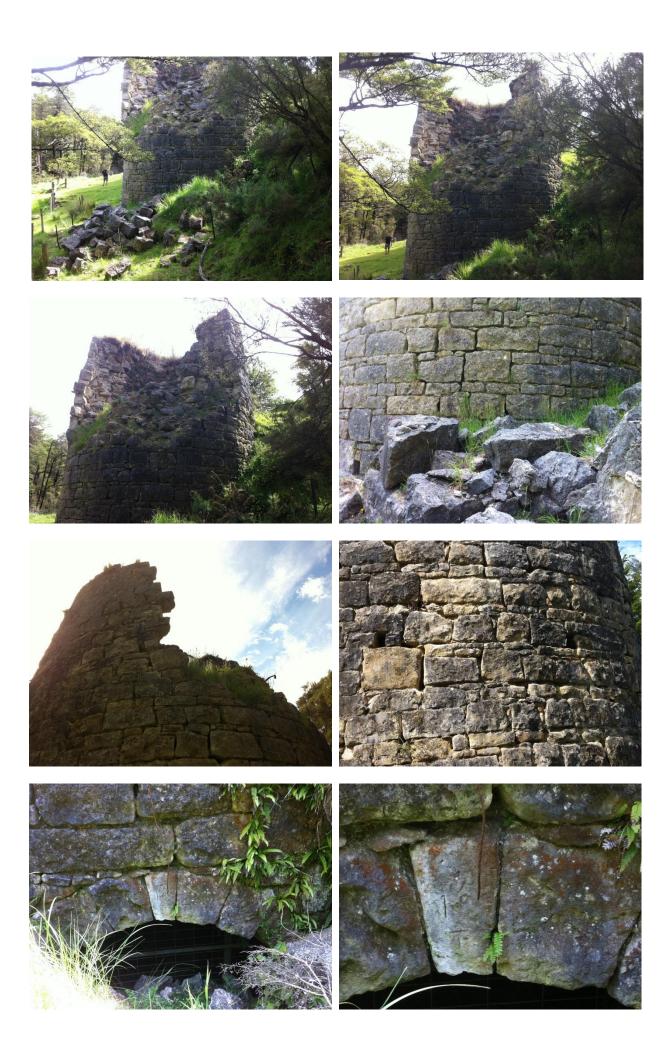
Setting:

The kiln is located in a steep gully a short walk from the nearest access track. The structure is built tight into the side of the slope which has probably helped to prevent the whole kiln being demolished during the earthquakes. It is currently surrounded by grazing land. Due to its location within the gully, the kiln is not actually visible until you are right beside it, then forms quite an interesting structure in the landscape. The setting is of high importance due to being the first limestone kiln in the area and its proximity to its associated quarry.













Photograph of the 'pot' kiln believed to have been taken on opening day